

CLAIMS

What is claimed is:

1. An assembly method for a semiconductor device assembly using wire bonding device having an upper clamp member and a lower clamp member, said method comprising: forming a strip of lead frames, said strip having opposed rails, having dam bars between said opposed rails, having at least two inner leads, having at least two outer leads, having a die mount paddle and having at least one integral clamping tab, said at least one integral clamping tab extending outwardly for contact by said upper clamp member; attaching a semiconductor device to said die mount paddle, said semiconductor device having a plurality of bond pads; aligning said strip of lead frames on said lower clamp member of said wire bonding apparatus having said upper clamp member overlying portions of said inner leads and portions of said outer leads of said at least one clamping tab; and attaching at least two bond wires to said plurality of bond pads of said semiconductor device and portions of said inner leads.

2. The method of claim 1, further comprising the steps of: forming said die mount paddle having the upper surface thereof at a level below an upper level of said inner leads; and deforming said at least one clamping tab to clamp portions thereof.

3. The method of claim 1, further comprising the steps of: removing said strip of lead frames and said semiconductor device from said clamp; and encapsulating a portion of said strip of lead frames, said semiconductor die, and said plurality of bond wires extending between said strip of lead frames and said semiconductor device in a material.